JUNIOR Scholastic

Acme Photo

VOLUME 1
NUMBER 9

THIS ISSUE: RADIO AND TELEVISION

NOVEMBER 13
. . 1937 . .

THE WORLD AT WORK

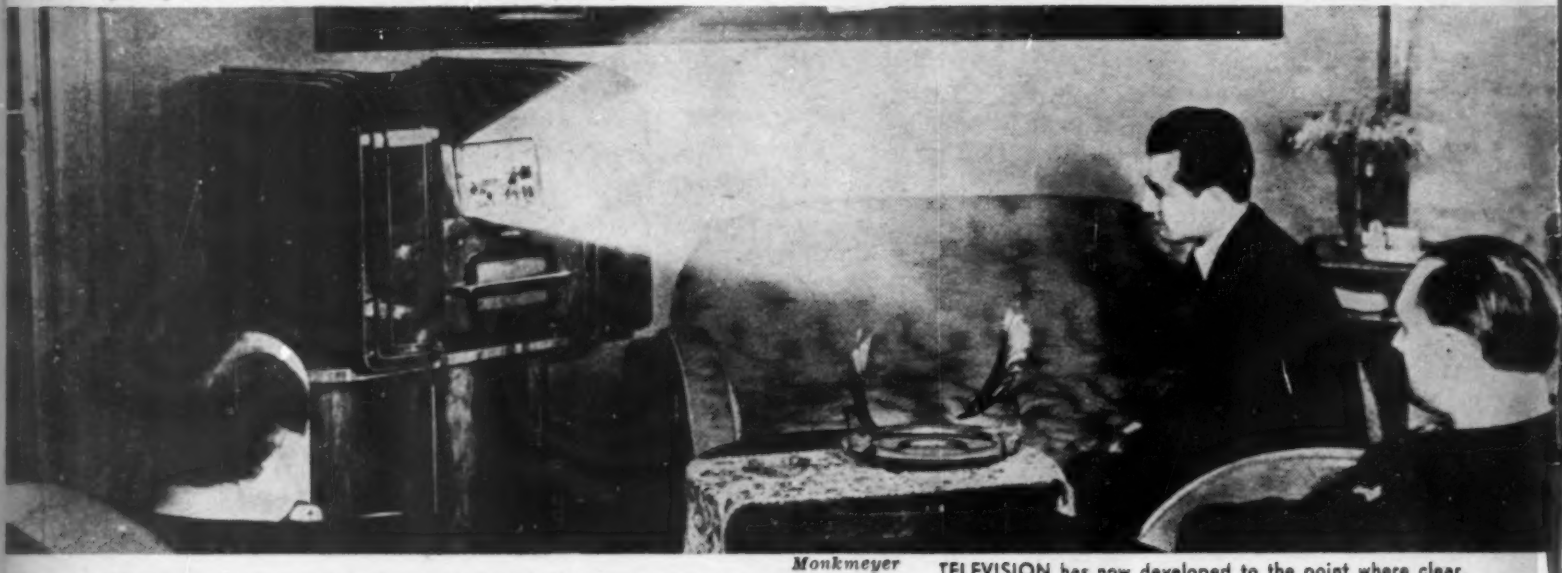
Junior Scholastic's Weekly Picture Page

RADIO and TELEVISION are the young twin wonders of Communication. They seem so magical, arriving as they do "right out of the thin air." In this issue, we hope to give you a good idea of the real work the "twins" are doing.

CBS

Your radio offers you a wide choice of entertainment, and many opportunities to increase your knowledge. You can enjoy funny programs (such as Col. Stoopnagle and Budd, shown at right), as well as the finest of music. The picture above shows the control room during the Ford Sunday symphony hour. The program director, watch in hand, is signaling the orchestra conductor to start playing.

NBC



Monkmeyer

TELEVISION has now developed to the point where clear, sharp moving pictures can be "telecast" a distance of 30 miles. Picture above shows how it would appear in your home. The size of the screen is 7 by 9 inches, which is almost as large as the image can be cast at the present time.

CBS

Official photograph, U. S. Army Air Corps

We usually think of radio as a source of entertainment and education. We must not forget that its original purpose was to send messages, especially to and from ships at sea. Now ships in the sky rely heavily on radio to guide them on their course. The above picture shows a class of army flying cadets, studying radio buzzer at Randolph Field, Texas. At the right, we see a class of another kind. These are students of broadcasting, trying out various sound-making devices. The steps (No. 1) are used for making the sound of walking up or down stairs. No. 2 is a man playing records of sounds, such as the crowing of a cock, city traffic, etc. No. 3 shows sandbags, which when dropped, make sound of body falling. No. 4 is chopping trees or logs. No. 5 is a strip of gravel for sound of footsteps on gravel. No. 6 is straw broom for footsteps through forest. No. 7 is platform for footsteps on wood. No. 8 slabs of slate, is for footsteps on cement.

TELEVISION NEXT

LAST summer in London, a group of tennis fans sat in a room in Alexandra Palace watching a tennis match that was being played twelve miles away on the famous courts at Wimbledon.

It was TELEVISION—perhaps the clearest and most successful public demonstration of it that has been made up to this time.

On this particular day, the match was between Donald Budge and Frank Parker, the American stars. A reporter who saw the telecast (as a television broadcast is called) described it as follows:

"I saw it played on a television screen, eight inches by ten, in a room in Alexandra Palace, twelve miles from Wimbledon. It was a cloudy day, but the little miracle came off beautifully. Budge, the size of your index finger, against Parker, the size of your little finger, wielding match-stem racquets hitting a speck of white. You could hear the impact of the racquets, the judge's droning count, and the barking of the linesmen. You could see the tiny heads of the spectators, moving in unison, following the flight of the pin-head ball. Sometimes the server was shown, close up, but mostly you saw the whole court, no larger than a desk blotter. It was like watching a photograph in an album come to life."

"Home Set?" Where?

On the opposite page you see a picture showing what a home television set looks like. There is a soccer game appearing on this screen.

"Home set," did we say? In whose home, and when do we get it?

The picture on the opposite page shows an Italian set which costs about $500. In England the lowest priced set is about $250. No sets are yet made in the United States. But supposing you could buy one for, say $200. You would be foolish to do it now—unless you lived within a radius of 30 miles of New York City or Philadelphia — because you would have nothing to look at. Only from New York and Philadelphia is television being sent out by experimental stations. And one of the limitations of television at present is that it cannot be sent further than 30 miles. The ultra-short waves used in television go in straight lines. The horizon is their limit.

Experimenters have found several ways of sending pictures through the air, but the basic principle of all methods is the same: A special kind of camera, using a vacuum tube called an "iconoscope," projects the pictures on a sensitized plate. Immediately the picture is changed from one of "light values" into one of electrical impulses. The photo-electric cell ("electric eye") makes this possible. An explanation of how this is used to send photographs over telegraph and telephone wires appeared in last week's Junior Scholastic. A tiny beam of electrons "scans" or traces the picture which has been projected on a sensitized plate consisting of thousands of photo-electric cells, and breaks it up into about 200,000 tiny parts. Each of these tiny "photographic tone" parts becomes an electrical impulse that is sent out over ultra-short-waves by the radio transmitter. Each picture is scanned in one-thirtieth of a second to give the illusion of motion on the receiving screen.

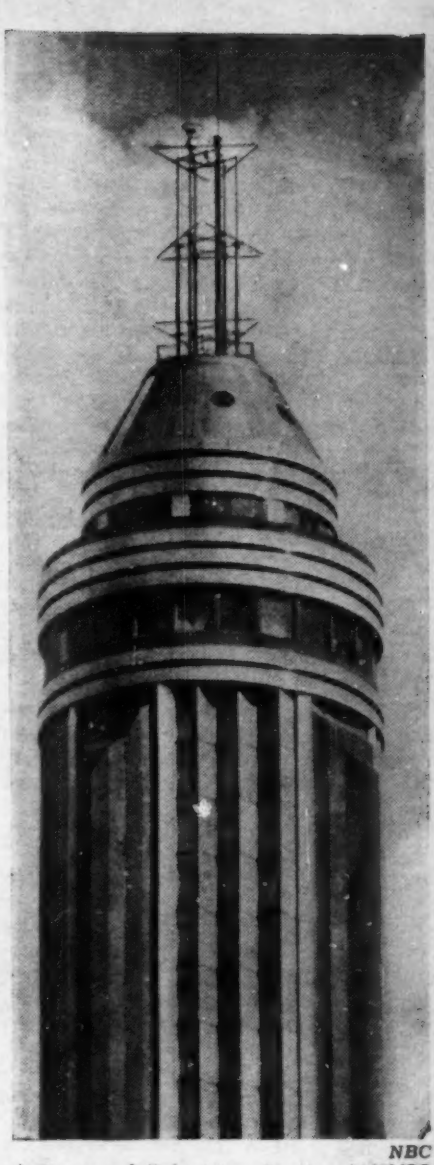
11,600,000 per Minute

At the receiving end, the television set picks up the impulses just as your radio does, but it is also equipped to change these impulses back into pictures. The image, when projected on the screen, consists of these thousands and thousands of tiny dots, but when in their proper relation to each other and in motion, they look like a whole, unbroken picture. Television can send out 11,600,000 impulses (which become photographic dots) each minute!

Most radio broadcasts are sent through the air over long waves. Police broadcasts and foreign programs usually come over short waves. Television needs ultra-short (very short) waves, for only the ultra-short waves can carry such a great number of impulses. These ultra-short waves travel only about 30 miles. How, then, can telecasts ever be sent all over the United States?

Some scientists say "Use telephone wires." In scientific laboratories, inventors are working on this problem. They have succeeded in relaying telecasts over the "coaxial cable" used by the telephone companies. This is a hollow lead pipe ⅞ inch in diameter. Through this pipe run two copper rods about the size of a lead pencil, each wound with fine copper wire. Around the rods are eight insulated telephone wires. The coaxial cable will carry all the impulses which television needs. One of these "television pipes" now runs between New York and Philadelphia and is being used for testing.

When our television fan gets his set what will he see? Will he get his money's worth out of the programs? Will he enjoy television after the newness wears off? Will he want to watch a television program every night? These are all questions the public and the radio people are asking.



NBC

Antenna of Television Station W2XBS perched atop the Empire State Building.

Seeking answers to these questions, Columbia Broadcasting System has established a program department for television. Head of this department is Gilbert Seldes, well-known writer and critic. He is trying to work out programs to be used when receiving sets are finally put on sale in this country. At first, Mr. Seldes thinks, the novelty of television will attract many people. But that will soon wear off. He is making plans for programs that will be as entertaining and popular as today's

Turn to page 10

JUNIOR SCHOLASTIC, a weekly for the Upper Elementary Grades and Junior High Schools. Published every week during the school year—Sept. through May inclusive—except during the holidays at Thanksgiving, Christmas, Mid-Term and Easter, by Scholastic Corporation; M. R. Robinson, Editor. Entered as second-class matter Sept. 1, 1937, at the post office at Pittsburgh, Pa., under the Act of March 3, 1879. Copyright 1937. Subscription price: For two or more copies to one address, 80c a year each (32 issues); 40c a semester each (16 issues); single subscriptions, $1.25 a year. Address subscriptions to Junior Scholastic, Chamber of Commerce Bldg., Pittsburgh, Pa., editorial correspondence to 250 E. 43rd St., New York, N. Y.

WE'RE ON THE AIR!

The Story of Radio, As Dramatized for Broadcasting

THROUGH the cooperation of the American School of the Air and the Columbia Broadcasting System, Junior Scholastic here presents the script of the broadcast THE STORY OF RADIO. The script has been shortened from a 30-minute broadcast to one of about 20 minutes. This script will give pupils an idea of how directions are written. The directions and stage business (BIZ) appear in italic type. The direction OFF means "off the mike"—spoken with the head turned away, so that the voice sounds as though it were coming from another part of the room. Pupils can do this broadcast in class, in front of a dummy microphone.

ANNOUNCER: This is Columbia's American School of the Air. Today we present the story of RADIO.

NARRATION: The sending of messages and entertainment across great distances by no other means than electric waves in space, is an idea that would have sounded fantastic to our ancestors. Today radio has entered nearly every American home. So swift has been the rise of the industry, so sudden its widespread popularity that one is apt to forget the men whose painstaking efforts made the science of radio possible. Even the 19th Century which had seen such scientific advances as the railroad, the steamship, the telegraph and telephone had no conception of a method that was to conquer the difficulties of distance with such incredible speed.

Though we think of wireless as the most modern of devices, as long ago as 1864, a Scotch scientist, James Clark Maxwell, stated the principle on which modern broadcasting is based. He said that electrical impulses *ought* to travel into space in waves, moving with the velocity of light. This was frankly theory, quite unproven.

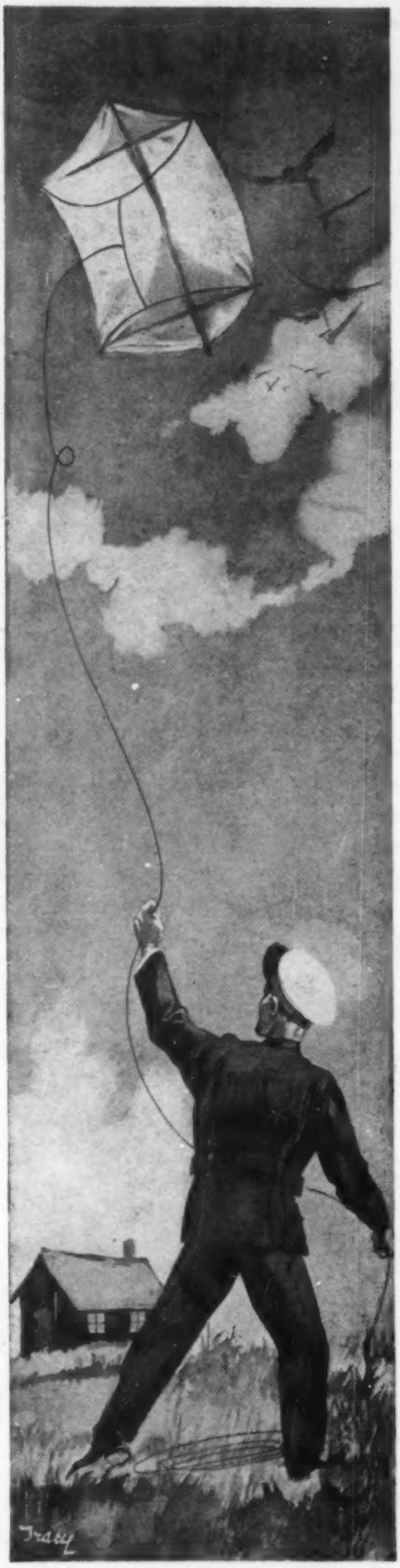
No one was able to confirm or deny his theory until 1888. By that year Heinrich Hertz, a German scientist, had devised a detector with which he was able to measure the wave length and velocity of electro-magnetic waves. So Hertz confirmed Maxwell's theory.

But many scientists were to work in this field before such waves were to be controlled and used for long-distance communication. Among them Eduoard Branly and Sir Oliver Lodge made important contributions.

Professor Augusto Righi, of Bologna, Italy, attracted some attention with his experiments and it was a young student of his who performed the first practical demonstration in the field of radio. On Salisbury Plain, in England in the summer of 1896—

HERBERT: Say, Tom. That's strange. What's the kite doing over there?

THOMAS: Kite? Oh, maybe it's just some boys out playing.



"... that young Italian fellow is experimenting with what he calls 'wireless' .. the kite holds wires up in the air."

HERBERT: No. It seems to be flying from that building.

THOMAS: Oh, now I know what it is. That shack is where that young Italian fellow is experimenting with what he calls "wireless."

HERBERT: But why the kite?

THOMAS: Well, strange as it sounds, I think the kite holds wires or something up in the air. Marconi calls it an aerial.

HERBERT: Marconi?

THOMAS: That's his name. Guglielmo Marconi.

HERBERT: Hmmmm. Why is he working here in England instead of Italy?

THOMAS: Well, I don't know. But I suppose the government is interested in the results of his invention.

HERBERT: That's just like Parliament. Spend money on some half-baked idea that no one can understand.

THOMAS: Now, not so fast, Bert. Do you realize what this wireless will mean? If it works you can send messages anywhere, ships at sea even. Places where it's impossible to string telegraph wires.

HERBERT: If it works! You know very well this Marconi hasn't been able to send messages any decent distance.

THOMAS: Well, he has sent them short distances in Italy. And now—say, wait a minute! I forgot. Today's the day for the demonstration.

HERBERT: What demonstration?

THOMAS: Marconi's going to try to send a message two miles.

HERBERT: Two miles! who cares? The telegraph can beat that any day.

THOMAS: But not through the air without wires! Come on over to the shack.

HERBERT: Nonsense! I don't know anything about this wireless business. Besides, they probably won't let us in.

THOMAS: Yes they will. I've been there before. Hurry up. I want to see this.

HERBERT: If you ask me you're getting all excited over nothing! Of all the crazy schemes—

THOMAS: Shhh! Don't make any noise, now. I'm going to open the door. Sneak in quietly and don't talk too loud.

HERBERT: This is ridiculous!

BIZ: *(Door opens—footsteps — door closes softly.)*

MARCONI *(Off)*: Well, gentlemen. We will be ready in a moment.

VOICE *(Off)*: Take your time, Signor Marconi.

HERBERT: Is that your great scientist? That youngster?

THOMAS *(Low)*: Shh! He's about twenty-five. And he knows his business. You'll see.

HERBERT: Who are the others?

THOMAS: I don't know. Scientists. Officials. Keep quiet and watch.

MARCONI *(Off)*: Ah! Now it is all ready.

VOICE *(Off)*: What are you sending, Signor Marconi?

MARCONI *(Off)*: The Morse code. Just a signal.

2ND VOICE *(Off)*: I understand the distance is two miles?

MARCONI *(Off)*: That is correct. The other station will reply at once. Now. If you will listen, gentlemen.

BIZ: *(Clicking of wireless key—off)*.

HERBERT: What are all those little knobs and gadgets? And what's Marconi wearing ear-muffs for?

THOMAS: Ear-muffs! That's a set of ear-phones. That's what he hears the message in.

HERBERT: Look how he keeps turning those knobs.

THOMAS: They're dials. He's trying to pick up the message from the other station.

MARCONI *(Off)*: Ah! It succeeds! Here, Signor. Take one of these ear-phones. Listen.

VOICE *(Off)*: By Jove. He's right. I can hear the signals plainly.

2ND VOICE *(Off)*: Let me listen.

3RD VOICE *(Off)*: Across two miles of space. Remarkable. Congratulations, Mr. Marconi.

MARCONI *(Off)*: Thank you! Thank you!

HERBERT *(Low)*: If you ask me, it's a hoax. And they're all in on it.

NARRATION: Marconi's demonstration proved that messages could be sent through the air. A year later the young Italian succeeded in establishing wireless communication between Salisbury and Bath, a distance of twenty-four miles. In November, 1897, Marconi built a transmitting station at Needles on the Isle of Wight. The British government, recognizing the value of such an invention to ships at sea, equipped a few vessels with wireless. In 1901, Marconi proved the practicality of a transatlantic wireless system. Now, improvements in the field of wireless came rapidly, especially in the United States. By 1904 there were transmitting stations at Block Island, Point Judith, Coney Island, and other important coastal points. The same year witnessed a wireless exhibit at the St. Louis Fair. Then, in January, 1907, an American scientist, Lee De Forest, was granted a patent on his invention of the audion, the first practical three electrode vacuum tube. Some two years earlier, J. A. Fleming, another American, had devised a vacuum tube with two elements, a filament and a plate. His tube acted as a detector. To the two elements of Fleming's tube, De Forest added a third, a grid. By this addition the vacuum tube became not merely a detector, but also an amplifier and generator of radio waves. This discovery led directly to the present day efficiency of wireless. In company with De Forest, the United States government began experimenting in this new medium. At Fort Hancock on Sandy Hook, during the winter of 1908—

CAPTAIN *(Off)*: 1, 2, 3, 4, 5. Fort Wood. Fort Wood. Fort Wood.

MAJOR: I'm about done in, Mr. De Forest.

DE FOREST: We all are, Major. My voice is nearly gone.

CAPTAIN *(Off)*: How do you get us now, Fort Wood?

MAJOR: Do you think they can hear us?

DE FOREST: I hope so.

CAPTAIN *(Off)*: 1, 2, 3, 4, 5. Fort Wood. Fort Wood. Fort Wood.

DE FOREST: There's really no reason why electrical waves shouldn't transmit the sound of the voice as easily as the sound of a wireless signal.

CAPTAIN *(Off)*: How do you get us now, Fort Wood?

MAJOR: Seems to be different, sir. Sometimes Fort Wood gets us fairly clearly. Other times they can't hear a thing.

DE FOREST: Well, that station's at Fort Wood, on Bedloes Island. Right at the foot of the Statue of Liberty isn't my idea of the best place for a wireless telephone station.

CAPTAIN *(Off)*: 1, 2, 3, 4, 5. Fort Wood. Fort Wood.

MAJOR: Did I tell you an amateur operator picked us up in his receiver last night? Fellow in Brooklyn.

DE FOREST: Really?

CAPTAIN *(Off)*: How do you get us now, Fort Wood?

MAJOR: Yes. But all he could get was the numbers. Couldn't make out the words at all.

DE FOREST: Still it's encouraging to know he could hear us.

CAPTAIN *(Off)*: 1, 2, 3, 4, 5. Fort Wood. Fort Wood. Fort Wood. Say, Major, I can't keep this up much longer.

MAJOR: Rest a minute, Captain.

CAPTAIN *(Fading in)*: Huh! For all we know those birds over at Fort Wood might be out for a walk.

DE FOREST: Don't worry, Captain.

Westinghouse

ABOVE: Early broadcasting studios had to take "any old available corner." Here is WBZ (Springfield, Mass.) in 1921.

LEFT: A familiar scene to your older brothers and sisters, your parents and teachers. Listening to a broadcast with a crystal detector "Radiola Jr.", 1921.

They're listening. They'll be at their set all night.

CAPTAIN: They have the soft detail. All they do is listen while we ruin perfectly good voices.

DE FOREST: Whose turn is it to do the talking?

CAPTAIN: Oh, it's mine for another fifteen minutes. But I've got to have a drink of water.

DE FOREST: Well, let's put the phonograph on again.

MAJOR *(Fading)*: I'll get it ready.

CAPTAIN: I don't know which I dislike the most—saying 1, 2, 3, 4, 5, or listening to that blame Anvil Chorus.

DE FOREST: I'll spell you till the record is on. *(Fading)*

CAPTAIN *(Calls)*: Hurry up with that record, Major.

DE FOREST *(Off)*: 1, 2, 3, 4, 5. Fort Wood. Fort Wood. Fort Wood.

MAJOR: Here, help me carry this over to the microphone. Careful of that record. It's the only one we have.

CAPTAIN: Don't I know it!

DE FOREST *(Fading in)*: How do you get us now, Ford Wood?

MAJOR: Put it down on the table. Easy!

DE FOREST: 1, 2, 3, 4, 5. Fort Wood. Fort Wood. Fort Wood.

CAPTAIN: All set, Mr. De Forest.

DE FOREST: All right, boys. Turn it on!

CAPTAIN: Music for the savage air waves of America.

BIZ: *(Click—Grinding of rusty phonograph—music of record. Piece is "Anvil Chorus" from Verdi's "Il Trovatore". Up—Fade)*

NARRATION: The music of the little phonograph in Fort Hancock was probably the first musical program ever broadcast. It was used to rest the tired voices of the experimenters. But, every day the number of amateur wireless operators in the United States grew larger. Men, throughout the country were finding wireless a fascinating study. Then, the night of August 4th, 1914, in the Captain's cabin of the S. S. Kronprinzessin Cecile, about 850 miles off the Irish coast, bound east for Germany—

BIZ: *(Knock on door—off)*

CAPTAIN: Ja? Come in.

BIZ: *(Door opens—off)*

MAN *(Off)*: Herr Captain.

CAPTAIN: What is it? A message?

BIZ: *(Door closes)*

MAN *(Fading in)*: Ja, Herr Captain. This message just came over the wireless, from Berlin, in code.

CAPTAIN: Code? Ahhh! Give it to me.

BIZ: *(Crackle of paper)*.

MAN: I took the liberty, Herr Captain, of decoding it at once.

CAPTAIN: Good. Send the Chief Officer to me. Schnell!

MAN *(Fading)*: Yes, Herr Captain.

BIZ: *(Door opens and closes)*.

CAPTAIN: Ach. Now let me see. Here on the chart. Ja. Ja. Gutt! That is the place.

BIZ: *(Door opens—closes—off)*.

OFFICER *(Fading in)*: You sent for me, Herr Captain.

CAPTAIN: Ja, Herr Richter. Listen. By wireless from Berlin. WAR DECLARED. RETURN AMERICA AT ONCE. AVOID BRITISH PATROL SHIPS. MAKE ALL SPEED POSSIBLE. GODSPEED. It is an order, Herr Richter.

OFFICER: Yes, Herr Captain.

CAPTAIN: We are carrying 10 millions in gold and one in silver. We cannot risk that falling into the hands of the enemy.

OFFICER: Nein, Herr Captain.

CAPTAIN: I take the bridge at once. We put about immediately. I want full speed at all times. I will chart the course myself. We are making for a place called Bar Harbor, in Maine. We must reach neutral territory.

OFFICER: And the passengers, Herr Captain?

CAPTAIN: They are to be told nothing.

NARRATION: Some days later when the Kronprinzessin Cecile was in sight of shore—

VOICE *(Off)*: I tell you I'm right. The sun should be on the other side.

Westinghouse

KDKA's new 710-ft. antenna tower at Saxonburg, Pa., is the highest welded structure in the world. During a storm, it becomes charged with static, and crackles and sparks continuously.

2ND VOICE: Nonsense! I asked the steward.

JOAN: Whatever are those men arguing about, Daniel?

DANIEL: Oh, that's old Jenkins, Joan. He's got some funny idea that the ship's been turned around. Says it should be going the other way.

JOAN: Why, that's ridiculous.

DANIEL: Sure. But you can't convince him.

JOAN: Well, he'll soon find out. There's the coast looming up ahead.

DANIEL: Yes.

JOAN: Did you ask anyone why the voyage took so long this time?

DANIEL: Yes. An officer. He said we went way off the course to avoid a bad storm. And that's the reason we've been travelling so fast.

2ND VOICE: Say, there is something wrong here! That's not the German coast.

WOMAN: What's that?

VOICE: I knew it! I knew it!

2ND VOICE: Are you sure?

3RD VOICE: Of course I'm sure. I've crossed on this line dozens of times.

JOAN: Gracious! What on earth has happened!

DANIEL: Wait a minute, folks. I know where we are! I used to sail in these waters.

VOICE: Well, young man? Where are we?

DANIEL: Off the coast of Maine. Right outside Bar Harbor!

JOAN: What? Back in America?

3RD VOICE: This is an outrage!

WOMAN: Why I never heard of such a thing! I'm going to see the Captain! The man must be intoxicated! I shall complain to his superiors.

BIZ: *(Hubbub of excited voices—"Imagine." "This is terrible!" "Not even Europe." "In Maine?" "Maine!"—Up voices—Fade)*

NARRATION: If the 1200 passengers on the Kronprinzessin Cecile were surprised, so were the inhabitants of Bar Harbor when the big liner entered the quiet waters of the bay. The wireless message to the ship's Captain had changed not only the destination of the vessel but the plans of all on board.

The outbreak of the World War brought great changes in the field of wireless. The stations of the amateur operators were closed by the various governments and wireless telegraphy was regulated by the same authority. Both the Allies and the Central Powers used wireless to communicate with their intelligence units throughout the world.

In 1915, the Naval wireless station, at Arlington, Virginia, succeeded in

Turn to page 10

PEACE ON EARTH

*A Reading for Armistice Day**

Peace, dear nurse of arts, plenties, and joyful births.

—William Shakespeare.

By Eva Taylor

WHEN we read books of history, we find that man has been a war-like creature. But when we read other books, we find that his poets and thinkers have long dreamed of peace.

Four hundred years before Christ, a Greek orator, Isocrates, said to his people:

Peace should be made with all mankind. It should be our care not only to make peace, but to maintain it. But this will never be until we are persuaded that quiet is better than disturbance, justice than injustice, the care of our own than grasping at what belongs to others.

Even the Romans, great military people though they were, were not without their friends of peace. Cicero, Rome's greatest orator, said an extreme and startling thing about war and peace:

I prefer the most unjust peace ever made to the justest war ever waged.

All through the Christian era, Christian armies have slaughtered each other while praying to the same God, yet the founder of the Christian religion said more extreme and startling things concerning strife and peace than anyone else has ever said. Christianity is not the personal religion of all Americans, but if we would know our history and especially the history of men's thinking, we must know what Jesus of Nazareth said. We must know because he is one of the figures of history whose life and words have influenced great numbers of men.

Concerning strife with arms, he did not say, as many men have, that those who took up arms would win glory and renown. He said:

Those who take up the sword shall perish by the sword.

So convinced was He that violence bred violence, that hate could never end itself, and that only love and brotherhood could finally dissolve the differences between men and make the world a better place, that He said such things as:

Blessed are the meek; for they shall inherit the earth.

Blessed are the peacemakers; for they shall be called the children of God.

Love your enemies; do good to them that hate you. Bless them that curse you and pray for them that despitefully use you.

Resist not evil; but whosoever shall smite thee on thy right cheek, turn him the other also. And whosoever shall compel thee to go a mile, go with him twain.

Give to him that asketh thee, and from him that would borrow of thee, turn thou not away.

Men do not all agree about these words of Jesus. Some say that they are a kind of impractical idealism that has no relation at all to everyday affairs. Other men say that there is great truth in them, but that Jesus used exaggeration, to make His point, just as we sometimes say such things as that we are dead tired, or that someone split his sides laughing. Still other men believe that Jesus meant quite literally just what He said; that is, He so mistrusted violence that He did not believe in its use under any circumstances.

The first group of modern men to boldly declare that war was an unholy thing which civilized men should outgrow and renounce, was the English Friends, or Quakers, under the influence of their founder and leader, George Fox.

He said that all strife was wrong, and that he would not go to war, or take up arms against any man, even for the king. In 1660, his followers sent a message to King Charles II which read as follows:

We utterly deny all outward wars and strife, and fightings with outward weapons, for any end, or under any pretence whatever; this is our testimony to the whole world. The Spirit by which we are guided is not changeable, so as once to command us from a thing as evil, and again to move us unto it; and we certainly know, and testify to the world, that the Spirit which leads us into all truth, will never move us to fight and war against any man with outward weapons, either for the kingdom of Christ, or for the kingdoms of this world.

This not only was dangerous doctrine to most of the people of the seventeenth century; it was wellnigh treason. Fox was beaten, stoned, put in the stocks, and many times thrown into prison.

But he won converts and the Friends, as his followers called themselves, became a goodly company who stood for what they believed to be right with a boldness and a courage equaled only by the early Christians who defied the Roman emperors.

William Penn, who was the greatest of them all, said:

Christians have embrewed their hands in one another's blood, involving and interesting all they could the good and merciful God to prosper their arms to their brother's destruction. Yet their Savior has told them that He came to save and not to destroy the lives of men, to give and plant peace among men. And if in any sense, He may be said to send war, it is the Holy War indeed, for it is against evil, and not the persons of men. Of all His titles, this seems the most glorious, as well as comfortable for us, that He is the Prince of Peace.

We live in a day when not only the Quakers question war. All thinking people question it.

The Pope pleads for peace, and Catholics organize the *Catholic Association for International Peace* in whose literature I have also read startling things, things that make the twentieth century Catholics, who say them, brother in their thinking to Jesus the Jew and William Penn the Quaker.

Rabbis remind their people that Jewish prophets and seers have long loved peace.

Men of many religious creeds are saying that war is the most awful denial of brotherhood that the world knows. Nor is this all. Great numbers of men of the world who pride themselves upon speaking from a purely practical point of view, dol-

Turn to page 10

*"Peace on Earth" is a chapter from the book *Men Are Brothers*, by Eva Taylor, and is reprinted here by permission of The Viking Press, publishers, New York.

CALLING CQ CQ CQ

MORE than 60,000 amateur radio operators in all parts of the world recognize the above letters. They mean "Calling anyone who's listening!" and may bring answers from Australia, India, or Middletown, Ohio.

If you have an all-wave radio set at home, perhaps you've tuned in on some of these ham conversations. ("Ham" is radio abbreviation for amateur.) Once in a great while, if you are lucky, you may tune in on something exciting—a thrilling rescue or a budding romance.

Who are all these amateur radio operators? They are boys and girls, men and women, from eight to eighty years old. (There are 60,000 licensed amateurs in the world. Of these over 44,000 are in the United States.) They are bellhops, taxi drivers, school boys, housewives, ball players, doctors, orchestra leaders—to name only a few. Some are blind. Some are permanent shut-ins who roam the world by radio. These have formed an organization which they call the Chair-Warmers Club. They have regular meetings over the air.

Wilmer Allison, the tennis player; Freeman Gosden, who is Amos of "Amos 'n' Andy"; and Captain Frank Hawks, the ace flyer, are all active hams.

Almost all amateur radio operators are self-taught, and build their own apparatus. They are interested in radio purely as a personal hobby, and with no thought of making money.

The place where their apparatus is kept is called "the shack." It may be a complete room with the most modern equipment, or a corner of the cellar or the attic with a simple home-made set. Most hams carry on their conversations by Morse Code by using a telegraph key. About 25% of them use regular microphones and actually talk over the air.

No one can operate an amateur broadcasting station without a license. In the United States these licenses are granted by the Federal Communications Commission (see article on page 12 of this issue) to persons who have passed a strict examination.

Most amateurs belong to the American Radio Relay League. This in turn is part of the International Amateur Radio Union, which combines the hams of 28 countries. The official magazine of these groups is a monthly called *QST*.

Peace On the Air

In their own way, hams form a sort of world peace organization. Many lasting international friendships are formed over the air. There is never anything formal or high-hat about ham conversations. For example, a Washington, D. C., taxi driver calls a high British official in Bombay, India, by his first name. They have met over the radio waves and become fast friends.

How does an amateur call the person he wants to talk to? He doesn't, unless he has made arrangements before. He sends out a general call (the CQ call), and talks with anyone who answers. Every ham knows the thrill of the unexpected, for he can never tell from where an answer will come.

After they have finished a conversation, hams exchange QSL cards. These are post-cards which each ham has printed with the call number of his station, and information about his apparatus. These cards are precious. Every ham's ambition is to have enough cards from all parts of the world to earn a WAC certificate. This certificate is given by the International Amateur Radio Union to every operator who has "Worked All Continents."

Because most amateurs are in America, they all use English (broken or "the king's") in their conversations. They also use special code words. We have already mentioned "ham," "shack," CQ, QSL, and WAC. Others include QSO—conversation; OM—old man (any boy operator); YL—young lady (any girl operator); XYL—married girl operator; 73—best regards; 88—love and kisses.

Many thrilling heroic stories can be told of hams who stuck to their broadcasting sets without food or rest for days during times of disaster. Earthquakes, hurricanes, and floods generally cripple all forms of communication — mail, telephone, telegraph, and even commercial broadcasting stations. Amateurs who have their own power supply are able to keep in touch with the rest of the world.

---

*The Rabbits' Song Outside the Tavern**

We, who play under the pines,
We, who dance in the snow
That shines blue in the light of the moon,

Sometimes halt as we go—
Stand with our ears erect,
Our noses testing the air,
To gaze at the golden world
Behind the windows there.

Suns they have in a cave,
Stars, each on a tall white stem,
And the thought of a fox or an owl
Seems never to trouble them.
They laugh and eat and are warm,
Their food is ready at hand,
While hungry out in the cold
We little rabbits stand.

But they never dance as we dance!
They haven't the speed nor the grace.
We scorn both the dog and the cat
Who lie by their fireplace.
We scorn them licking their paws
Their eyes on an upraised spoon—
We who dance hungry and wild
Under a winter's moon.

Other Verse

When the pumpkin yellows
And the standing corn
Is pale with frost, and cobwebs
Hang silver in the morn,

When Orion rises
Over fields cut bare,
And the fallen apples
Smell cidery on the air,

Then comes the witches' Sabbath
Of the flocking crows,
Standing by the barn door,
Every farmer knows

When he hears that clangor,
Sees that windy flight,
Winter soon is coming,
Cold, and early night.

* * *

When all the other leaves are gone
The brown oak leaves still linger on,
Their branches obstinately lifted
To frozen wind and snow deep-drifted.

But when the winter is well passed
The brown oak leaves drop down at last,
To let the little buds appear
No larger than a mouse's ear.

* * *

Swift things are beautiful:
Swallows and deer,
And lightning that falls
Bright-veined and clear,
Rivers and meteors,
Wind in the wheat,
The strong-withered horse,
The runner's sure feet.

And slow things are beautiful:
The closing of day,
The pause of the wave
That curves downward to spray,
The ember that crumbles,
The opening flower,
And the ox that moves on
In the quiet of power.

*This poem, and the others here, are by Elizabeth Coatsworth, and are from her book "Away Goes Sally." Reprinted by permission of The Macmillan Company, publishers, New York.

"HELLO ATLANTIS"

A Little Drama of a Ship-to-Shore 'Phone Call

WHEN you talk to a ship at sea your voice traverses a telephone channel combining wires and radio.

Let us suppose you are in your home in Maplewood—which is somewhere in one of the forty-eight states—calling your partner on a transatlantic liner. In the bustle of his preparations for the voyage you both forgot to exchange views on a matter of considerable moment to the firm. You pick up the telephone and ask for *Long Distance.*

The operator records your partner's name and the ship he is on.

"I will call you," says she. Hanging up, you glance out of the window at the wires that follow the winding highway and wonder whoever thought of connecting them up with a ship in the middle of the Atlantic.

Through your local exchange your voice is carried over Bell System wires to the Overseas Switchboard in the Long Distance Building in New York.

The ship-to-shore operator takes up the call and plugs in on a line to ship-to-shore "Control" at Forked River, some 45 miles south of Sandy Hook, on the New Jersey coast.

"Requesting the Atlantis . . . Operator 6050."

"Right," says a technical operator.

Soon afterward a green light appears in front of the ship-to-shore operator, signifying that the *Atlantis* is "on the line." The operator flips a key. Another link in the chain has been added. From the Overseas board through the control terminal the circuit now travels over more wires to a short wave radio station at Ocean Gate, a few miles from Forked River.

"Hello Atlantis . . . I have a ticket."

At the Ocean Gate station the words spoken by the operator pass through a series of vacuum tubes of greater and greater power, until they finally enter a nest of great double-ended tubes, water-cooled because of the power developed in them by a current forced through by 10,000 volts. This is the catapult that hurls them from the antenna into the blue vault above the Atlantic's billows.

By the time they take the air, the words just spoken in New York—part of the faint murmur that rises from the group of operators at the switchboard — have been amplified millions of times. In the process of turning them into radio impulses, there has been pumped into those syllables a power which—were they to be suddenly turned back into speech — would rattle the windows for miles around.

Picked up out of the blue by the tiny wires that sway to and fro aloft with the heaving of the ship, these impulses, faint after their long trip, are converted back into words. The operator on the ship replies and takes down the information.

"Thank you, New York. We'll have a report for you in a few minutes."

The *Atlantis* is ploughing eastward in the long dark swells southeast of the Grand Banks. A bugle has just sounded first call to lunch. Your partner, having finished a game of shuffleboard, enters the lounge where he learns, from a freshly posted bulletin, that the ship is enjoying moderate seas from the southwest, a light westerly breeze and rising barometer. A page halts beside him.

"New York calling you, Mr. Wiggam."

Having crossed the big puddle many times, Mr. Wiggam is not one to gape and rub the elbow at learning of some new convenience aboard a modern ocean liner. He nods.

"There's a booth just forward of the smoking room, sir. Will you take the call there?"

Mr. Wiggam says he will, and repairs to the booth. The ship's operator throws a key, twists a dial.

"Hello, New York."

"Hello, Atlantis."

"Serial five . . . I have your party."

A few moments later your own telephone rings.

"This is the overseas operator. . . . We are ready on your call to the Atlantis."

A second's pause, and then—

"Hello, Jack. This is Wiggam."

The radio operator on the Atlantis hears New York calling, and says: "Thank you, New York. We'll have a report for you in a few minutes."

The words of the two speakers flash back and forth between ship and shore through the Overseas Switchboard, in the Long Distance Bldg. in New York.

This little drama is from the booklet, *To Ships at Sea,* published by the American Telephone & Telegraph Co.

RADIO PLAY

Continued from page 6

transmitting a message by voice, both to Paris and to Honolulu. When the United States entered the War, a gigantic system of receiving stations was constructed at Otter Cliffs, Bar Harbor, Maine, and here Major E. H. Armstrong's, super heterodyne circuit was used not only to receive messages from the Allies but to detect and intercept the wireless communications of the enemy. Soon after the Armistice, radio became a foremost American hobby. Then, in the broadcasting room of radio station KDKA in the City of Pittsburgh, Pa., as the operators prepared to broadcast the first radio progam, on the evening of Nov. 2, 1920—

MAN: Well, boys, is everything ready?

VOICE: All set, sir. We go on the air at 9 o'clock sharp. As announced.

MAN: Good. I hope it runs smoothly.

VOICE: I think it will, sir. Have you made all arrangements to receive the bulletins on the election from the newspapers?

MAN: Yes. Jerry in the next room will take them over the telephone. He'll send them in here and I'll announce them into the microphone.

VOICE: Some of them should be in now.

MAN: Don't worry we'll have them as soon as the papers get them.

VOICE: We'll be on the air in a moment.

MAN: I know. I'm ready.

VOICE: Everything O. K. Pete?

PETE *(Off)*: O. K. here.

MAN: Now remember. Once we start broadcasting, everybody keep quiet. You can hear every sound. If you must tell somebody something write a note and pass it to him.

VOICE: We know.

MAN: Now, let's see. Opening announcement. Yes. Early returns. Yes. I guess I'm all set.

VOICE: Who's ahead in the early returns?

MAN: Harding.

PETE *(Off)*: Watch the clock. Six seconds to go.

MAN, VOICE *(Together)*: Six.

PETE *(Pause—Off)*: Five.

MAN: Five. Gosh. I'm nervous.

VOICE: Shhh.

PETE *(Off)*: Four seconds.

MAN: Four. Oh, pipe down. We can see the clock.

VOICE: Get up close to the microphone.

MAN: I am close!

PETE *(Off)*: Three seconds.

VOICE: Take it easy, now. Easy.

MAN: Shhh. Keep your eyes on the clock.

PETE *(Off)*: Two seconds.

MAN: Two. Gee!

PETE *(Off)*: One second.

MAN, VOICE *(Together)*: One.

PETE *(Pause—off)*: Here goes the switch. You're on the air.

VOICE *(Whisper)*: Say something! For gosh sake's start talking!

MAN *(Up)*: This is Station KDKA, Pittsburgh. Ladies and gentlemen of the radio audience Station KDKA tonight brings you its first program. The first we hope of many. We are broadcasting the results of the Presidential race between Warren G. Harding and Governor John M. Cox. Earliest returns from the city of Pittsburgh indicate that Harding and Coolidge are leading the Democratic candidates Cox for President and Roosevelt for Vice President by a safe plurality. *(Fading)* These returns are from the following election districts—

NARRATION: The owners of wireless apparatus throughout the country received this first program with joy. Letters poured into Station KDKA, requesting that broadcasts be continued. But there was little chance of their being stopped. Other stations opened in various sections of the country; factories began to manufacture radio receivers in bulk. The supply could hardly meet the demand of the public. Radio was sweeping the country. Nearly everyone wanted to enjoy this new means of entertainment.

NOTICE!

No Holiday-Week Issue of Junior Scholastic

This is to notify teachers and students that the week after next, there will be no issue of *Junior Scholastic*. The issue following this one, the Nov. 20th issue, will be received in the schools at the regular time. But the following week, don't expect a *Junior Scholastic* issue. We omit the issue of Nov. 27th, because it falls within the Thanksgiving holiday period. The issue following the Nov. 20th will be dated Dec. 4th, and you may expect to receive it between November 29 and December 1.

Though there is thus a break in the weekly publication of *Junior Scholastic* at certain holiday periods, this does not reduce the number of copies you receive during a semester. The dates of issue are so planned that you receive your full quota of 16 issues each semester.

RADIO BOOK FOR YOU

How would you like to know how radio programs are prepared, and how you can prepare one of your own, and get coaching help on broadcasting? If you do, we suggest that you buy the *Handbook for Amateur Broadcasters* (50 cents a copy). This little book contains many illustrations and much useful information about broadcasting. It was prepared in answer to requests from high school groups, who have been using the 32 one-act radio plays of the Scholastic Radio Guild. (The scripts are 25 cents each.) Send for a leaflet describing these scripts, and send your order for copies of the *Handbook* to Junior Scholastic Order Dept., 402 Chamber of Commerce Bldg., Pittsburgh, Pa.

PEACE

Continued from page 7

lars and cents, and bread and butter, say that war is an extravagant, inefficient, stupid, futile way of trying to settle differences, establish justice, guarantee peace, or bring prosperity to a nation. They say that modern warfare is so expensive and destructive that it will destroy even the seeming victors.

The nations prepare for war. Yet there is a will for peace in the hearts of millions of people. Never before in the history of the world were there so many books telling the whole truth about war—what it costs in money, men, and morale. More and more men are coming to believe that such thinkers as George Fox and William Penn were not mere dreamers, but practical men who were far-sighted enough to see that the ways of peace and good-will are the ways that will save men and nations, and preserve the good and beautiful things that men have thus far created.

We shall have peace on earth when the thoughts of the poets and prophets, the seers and the saints, who have loved peace and believed in brotherhood, have become the commonly accepted thoughts of the mass of men everywhere.

TELEVISION

Continued from page 3

movies and radio broadcasts.

Here are some more questions that are puzzling people about television: If people will be able to see and hear plays and music over their television sets, will they want to go to the movies? Will Hollywood producers take over the preparation of television broadcasts?

If Hollywood doesn't take over television, how will the broadcasting companies pay for the new programs? Will the advertisers pay for telecasts, just as they pay for broadcasts today? Maybe, but will the audiences be willing to look at a lot of advertising? Most people object to screen ads at the movies. Broadcasting companies depend on advertisers to pay their bills.

In England, they have no advertising on the air. People who own radio sets pay a tax to the government and the government uses the money to put on broadcasts. What course will America follow in television? We may not have to wait long to find out.

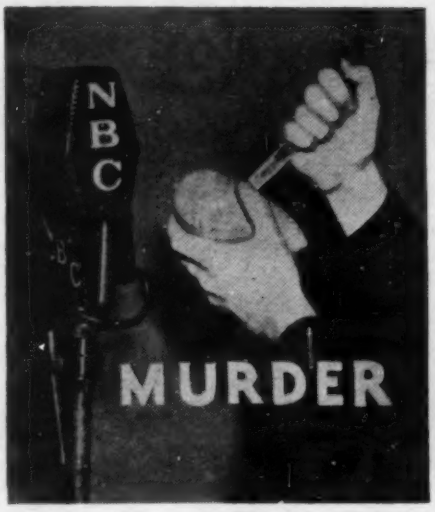
COMING NEXT WEEK

Next week's issue of *Junior Scholastic* will be built around the subject of BOOKS. The subject is right in line with the "communications series," which started several weeks ago with "speech."

HEAR! HEAR!

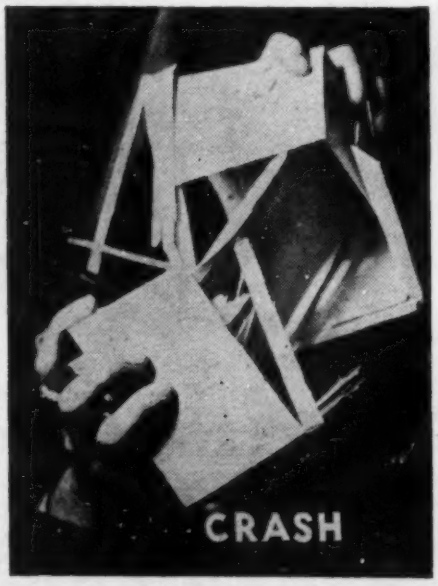
WHAT scenery is to the stage, sound effects are to radio broadcasting. Seven years ago the business of making "background noises" was a very small part of broadcasting. Today the big broadcasting systems have entire departments whose work it is to provide the right kind of sounds and noises to accompany broadcasts. Through the courtesy of the National Broadcasting Company, Junior Scholastic here presents a page of pictures showing some of the ways of making various noises and sounds. Besides making noises to order, every studio has phonograph discs on which are recorded thousands of different sounds.

GHOSTS: Clack these wooden sticks together for the macabre noise of dancing ghosts. ARMY: Dropping these wooden pegs repeatedly on a table makes a sound like a marching army. FIGHT: Paff! Zam! Zowie! Many a fight is fought by whacking the fist against this rubber sponge.



MURDER: Thrust a knife into a potato to make a noise like a murder the quiet way. SO BOSSY: Squeezing water-filled ear syringes into a pail makes a sound like a cow being milked.

CRASH: When the police come within range of the microphone, to break into a door, the noise of splintering wood is made by the crushing of a small wooden box in the hands. FIRE: For the crackling of wood in a fire, take a handful of cellophane and crackle it between the hands. Serves for either a four-alarm fire or the crackling of a peaceful camp fire.



HEADLINE NEWS

How China and Japan Will Observe Armistice Day

At eleven o'clock on November 11, people in the United States and in other countries throughout the world will observe two minutes of silence. Perhaps your school will have some sort of program in observance of Armistice Day, the nineteenth anniversary of the end of the World War.

At eleven o'clock on November 11, 1918, representatives of both the German and the Allied armies signed an armistice — an agreement to stop all fighting until terms for a permanent peace could be decided.

When news of the Armistice spread, the whole world celebrated. Many people believed that the signing of the Armistice meant the beginning of a peace that would last forever. Among the nations which celebrated the end of the war, which was called the "war to end all wars," were Japan and China. Both had fought on the Allied side.

How will these two countries celebrate Armistice Day this year?

They will probably be dropping bombs and firing bullets at each other. Although neither Japan nor China has declared war, a war has actually been going on since early this summer. (See articles in the Sept. 18 and Oct. 9 issues of *Junior Scholastic*).

• • •

Last week Japanese troops finally drove the Chinese out of Chapei, northern section of Shanghai, important Chinese city. The defenders showed no signs of collapse, but fell back to a new line of defense. Their courage has inspired all of China to stronger resistance of the Japanese.

The Japanese dropped leaflets from airplanes offering $1.47 to each Chinese soldier who would quit fighting. So far there has been no response to the offer. However, the Japanese have reported military gains in the north, in the provinces of Shansi and Suiyuan.

In spite of the war, there are still many foreigners in China. In Shanghai Americans, British, French, and other Europeans live in a section called the International Settlement, which is not far from Chapei. During the recent fighting, several British soldiers were killed by Japanese. Because of this, both British troops and American marines have been ordered to fire on all Japanese planes that fly low over the International Settlement.

At the present time, an international conference is being held in Brussels, Belgium, to try to bring peace between Japan and China. This conference is known as the Nine-Power Conference, because it was called by the nations which signed the Nine-Power Treaty in 1922 to guarantee the rights of China. The United States signed this treaty, and has sent Norman Davis as its delegate to the Conference. President Roosevelt is much interested in the success of this Conference, for he would like to have peace in all parts of the world once more (see article on page 12 of the Oct. 23 *Junior Scholastic*).

Homan in the Daily Kelsonian-Tribune

WOMEN AND CHILDREN FIRST

Uncle Sam Takes Over More "Air Wave" Space

The Federal Communications Commission has announced that it is going to regulate ten times as much radio space as it has been controlling up to now. This announcement means that there will be room for more stations in the ultra-short wave field. This field is useful for television, facsimile, army, navy, aviation, and police services. Space will be assigned to each of these services. This action by the FCC will open the way for many new developments in radio, experimenters say.

The FCC regulates all forms of radio communication. This is in addition to its work of regulating the telephone and telegraph systems (see "Who Runs the Wires?" in last week's *Junior Scholastic*).

Government regulation of radio was found necessary because the channels of radio are limited. There can be only a certain number of stations. If there are more, one will interfere with the other. (Try turning on your radio at home full power, and see how many stations you can find, one next to the other.)

Because radio channels are limited, they cannot be private property. Like the very air of which they are a part, these channels belong to the public. It is the job of the government, through the FCC, to see that these channels are used in the best interests of the public.

In order to do this, the FCC classifies all stations, according to the uses made of them. Among the most important classes of stations are: broadcasting, communication (radiotelephone and radiotelegraph), airplane, police, private companies (railroad, lumber, mining), and maritime (ship-to-shore, coast guard). The FCC has the power to assign bands of wave lengths to the various classes of stations and to assign particular wave lengths for each individual station. It also has the right to say how much power each station shall use, and the time of day during which it may operate.

Every radio station in the United States has to get a license from the FCC in order to operate. These licenses are issued only for six months, and have to be renewed by the commission as soon as they expire. In renewing licenses of broadcasting stations, the commission often considers the quality of the programs offered. Because of this, the Commission has been accused of censoring radio programs. The commission has also been accused of granting licenses for political reasons, of helping to develop radio monopolies, and in other ways losing sight of true public interest. Because of all these charges, the Senate may order a complete investigation of the FCC and the radio industry some time during the coming session of Congress.

Germany Loses Dr. Schacht as Minister of Economics

Dr. Hjalmar Schacht has resigned from his position as German Minister of Economics. For months Schacht opposed the policies of General Hermann Goering, Hitler's chief adviser and director of the Nazi 4-year plan. Schacht tried to resign several times, but Hitler refused to let him until last week. Although Hitler did not like some of Schacht's ideas, he did admire his ability to juggle Germany's finances.

Fitzpatrick in the St. Louis Post-Dispatch

ARMISTICE DAY, 1937

Goering's 4-year plan seeks to make Germany independent of the world for supplies of food and raw materials, in case of another war. Because Germany does not have enough natural resources of her own, substitute products have to be used. These substitutes are called "Ersatz." Many of these "Ersatz" products are very poor. Also there is a serious shortage of food. Schacht says that the 4-year plan is crippling German industry and ruining German markets in foreign countries. The money Germany is spending to manufacture arms and munitions is causing the national debt to become dangerously large.

Now that Schacht is out of the way, it is mainly up to Goering to improve conditions in Germany. Many critics think he is not a good enough economist to prevent further lowering of Germany's standard of living. Germany's collapse has been predicted many times during the past few years. It remains to be seen whether the present alarms are any more reliable than the others.

Labor "Peace Meeting" Called Off for a Week

An important conference between labor union officials began in Washington on October 25. It is of direct interest to 7,000,000 American workers, and will in some way affect all the people in this country. This conference is in the nature of a peace meeting between ten representatives of the Committee for Industrial Organization (CIO) and three officials from the American Federation of Labor. (A. F. of L.) They are seeking to find a way to stop the bitter two-year fight between the CIO and the A. F. of L.

The CIO opened the meeting with a peace proposal which the A. F. of L. promptly met with its own plan. A deadlock followed, and the meeting was called off for a week, to give the delegates a chance to talk over plans with their union chiefs. The two proposals show that the two groups are still far apart, and chances for peace don't seem bright at the moment. But there is still some hope for a real peace which would make American workers stronger and more united than ever in history.

A DICTATOR GIVES UP

Dictators die, or are killed, but few of them ever surrender their power of their own free will. People were surprised, therefore, when they heard that Federico Paez, president-dictator of Ecuador, suddenly announced that he would resign. Ecuador is a small triangular-shaped state in the northwestern part of South America. (Find it on your map.)

Paez became dictator two years ago. He spent much of his time jailing his political enemies, and preventing free speech among his people. At the same time he caused both prices and taxes to be raised. As people found they were becoming poorer and poorer, they began to protest, and threatened to overthrow the government. Their threats probably caused Paez to resign. The new president, General Alberto Enriquez, has promised to restore liberty and prosperity to Ecuador. The people there are waiting to see whether he will really keep his promise.

Acme

In his first "long jeans," Freddie Bartholomew "steps out" with another famous "youngster"—Deanna Durbin. Photographer snapped them on their way to a preview.

BARTHOLOMEW'S PAY

Freddie Bartholomew, 13-year-old screen star, has received a "raise" in salary. His new contract with the M-G-M studio gives him $40,000 more each year than he used to receive. Freddie himself is not half so much interested in this large sum of money as he is in the $1 a week pocket money he will have to spend himself.

Miss Millicent Bartholomew, Freddie's aunt and guardian, took him out of pictures last summer, because Metro-Goldwyn-Mayer refused to pay Freddie as much money as she thought he should have. Miss Bartholomew said his income was not big enough to live on, since most of it was used for taxes, agents' fees, and an allowance for his parents in England. (In a recent court trial, Miss Bartholomew won the right to take charge of Freddie.) The studio finally agreed to pay him more money.

1938 CARS SHOWN

"Putting the World on Wheels" is the slogan used by America's automobile industry for its showing of 1938 models, which began last month. In New York and 39 other cities people inspected the new cars.

Good business in the auto industry usually means good business everywhere, and people are looking to the auto industry to put business recovery on wheels and keep it rolling forward.

Here are some facts that show clearly the importance of this industry: It uses 25% of the steel produced in this country, 80% of the rubber, 75% of the plate glass, 33% of the nickel and lead.

Ali Baba (center) and his pals ponder the magic word to make the carpet rise. Sh-h-h. "Inflation!"

Junior Scholastic Recommends the New Movie

Ali Baba Goes to Town

A PWA project would look funny in Baghdad. But that's one of the things you'll see in *Ali Baba Goes to Town*. And it is funny. It's almost as funny as hearing the Sultan make a radio speech which begins "My friends. . . ."

This New Deal Baghdad is part of a Hollywood extra's dream. Eddie Cantor is the extra. His name in the picture is Al Babson.

Al goes to sleep while he is on an Arabian set. He dreams he is in Baghdad in the year 937. He tells the Sultan his name is Al Babson. The Sultan thinks he says "Ali Baba's son." The Sultan calls him Ali Baba and makes his prime minister of Arabia.

Ali decides something should be done about giving the people "a break." The people are crying at the palace gates for food. Ali gives them buttered toast and jelly. He persuades the Sultan to give Baghdad a New Deal like the one in America. He taxes everything in sight. He puts license plates on camels. He builds bridges, digs rivers, and puts up WPA oases. He gets the Sultan to give fireside talks over the radio.

Then the Sultan decides to run for president. He thinks it will give him more power. But the people want Ali Baba for president. In the election, the poor old Sultan carries only the outlying districts of Maino and Vermontash!

Ali Baba is elected president. But the Sultan's "nine old councillors" declare the election unconstitutional. The Sultan orders that Ali Baba shall be boiled in oil. Ali starts looking for a way to get out of the country. He finds an old rugmaker who has woven a magic carpet. The rugmaker can't think of the magic word to make the carpet rise. Ali fixes that. He jumps on the carpet, says "inflation," floats away and wakes up in Hollywood.

Though this picture pokes fun at the New Deal, President Roosevelt and the Supreme Court, it is all in the spirit of good fun. We have a feeling the President himself would laugh at it.

HITS AND MISSES

Heidi is the story of a little Swiss girl. To most people her life would not have seemed a happy one. She was an orphan and she was shifted about from one unfriendly person to another. But Heidi had a smile for everybody, and she taught other people how to smile and be happy.

Johanna Spyri wrote the story in German many years ago. Soon it was translated into eight other languages. It has become a favorite with children in many countries.

Heidi is a good part for Shirley Temple. And she proves it in this movie. She has forgotten many of her babyish tricks. Although she still works miracles with her dimples, she is natural, as natural as Heidi could be. It's hard to believe that any little girl could always have turned her own bad luck into good luck for others. But that is the sentimental story of Heidi.

Heidi's aunt, who is tired of looking after her, sends her to live with her grumpy old grandfather in the Swiss Alps. Before long, Heidi has him laughing and singing. Then the aunt comes and takes her away to be a companion to Elsa, a crippled girl. Elsa's governess hates Heidi and tries to give her to some gypsies. But Heidi's grandfather comes in time to save her and take her back home.

Non-Stop New York. A stowaway, a gangster, and a Scotland Yard inspector on a transatlantic air liner should add up to a good movie. But there's too much about murders and too little about flying in this one.

Heidi's grandfather (left) hasn't spoken a kind word in years. Heidi brings him to church and hands him a hymnbook. She and Goat Peter (right) do the singing.

SOME FUN

Beans Is Beans

A teacher called for sentences using the word "beans."

"My father grows beans," said the bright boy in the class.

"My mother cooks beans," said another pupil.

Then a third popped up: "We are all human beans."—*The Furrow.*

Chivalry

The preacher had chosen the lesser prophets as his subject. It had been quite a lengthy sermon. Finally at the end of the third hour he said, "And now we come to Malachi, the last of the lesser prophets. What will we do with Malachi? Where can we place Malachi?"

This was too much for the old lady in the rear of the church. Rising, she said: "You can give him my seat, sir. I'm going home."

Flip Flop

There was an accident and many people gathered about the wrecked car, when some one drove up and cried to the man that was lying beneath, "Say, Jim, did you have an accident?"

"Naw," came from beneath the car, "the kids have always wanted to see the works, so I turned the darned thing over for them."

Quick, the Flit

First Mosquito: "Why are you making such a fuss?"

Second Mosquito: "Whee! I just passed the screen test."

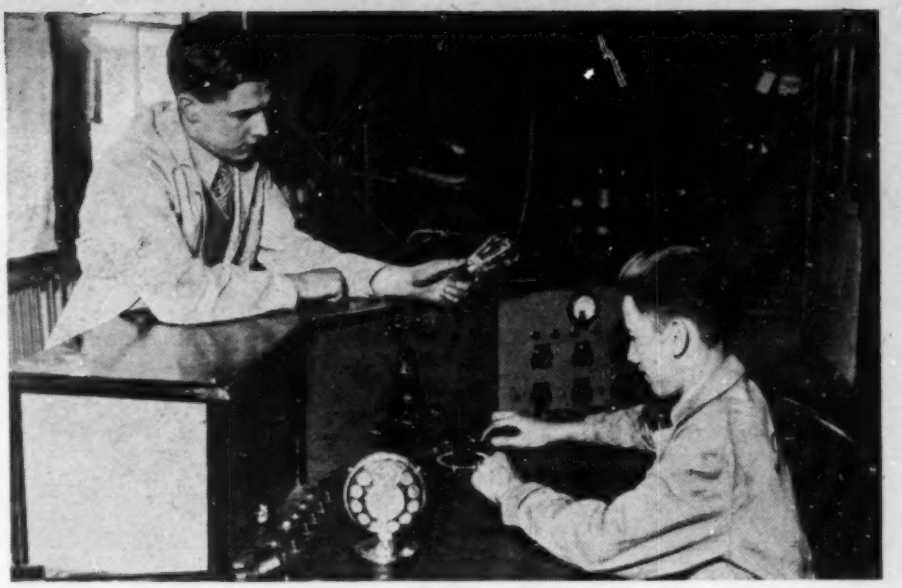
The Originator

Q. "Who invented the jig-saw puzzle?"

A. "A butcher who dropped a five-dollar bill by mistake into a meat-chopping machine."—*Montreal Star.*

R. Taylor in *The New Yorker*

A pushing young man in Patchogue
Runs a Radio Hour for the Dog.
His program of growls,
Barks, bays, whines, and howls
Is setting the dog world agog.



High School student radio engineers at Technical High School, Indianapolis, Ind.

JOBS IN RADIO

There is Room for the Well-trained

DO YOU have a mechanical bent? Have you selling or business ability? Have you musical, dramatic or literary talent?

Then there may be a career for you in radio or television as an engineer, a mechanic, a director, a business leader, or a performer.

Leaders in the profession think there will be a great future in radio. Why? Because there are so many possibilities for specialization.

Zeh Bouck in his book *Making a Living in Radio* (published by McGraw-Hill) says that the industry still offers great opportunities because of the many different abilities that can be used.

Check your own strong points to see whether you have any leanings toward the kinds of jobs radio and television will offer when you finish your schooling.

No other industry is so full of life and progress as radio, according to the magazine *Jobs and Careers.* Rapid changes and developments call for *trained* men, it says. Young men are advised to specialize in one of the many sub-branches of radio by Hugo Gernsbeck in the March, 1936, issue.

What are these different branches? Manufacturing . . . police radio . . . aviation . . . commercial communication systems . . . radio servicing . . . marine radio . . . and broadcasting are all listed as the chief radio occupations by Dodge's Telegraph and Radio Institute.

Television is a coming field related to radio. It is a new opportunity, calling for engineers, actors, directors, technical and research men and women.

Other fields related to radio are electrical surgery; radio prospecting for minerals, metals and oils; facsimile transmission and remote radio control.

Do you know that there are 300 young women employed by the National Broadcasting Company alone? Positions range from receptionist (the girl who meets and greets visitors) to program directors, and pay goes from seventeen to several hundred dollars a week.

How many of the 300 girls do you suppose earn $200 per week? And how many earn $17? The vast majority earn closer to $17. The average is between $25 and $35. They are receptionists, filing clerks, secretaries, stenographers. If they show ability they may rise to positions of more responsibility, helping arrange programs, edit scripts, serve as junior executives and assistants to heads of departments and become the heads themselves. In the business and professional world today man still has the far greater advantage over the woman, but women of ability are succeeding more and more in winning the places they deserve.

Station announcers today must have exceptionally well-trained voices if they are to get the better jobs. In addition to a good, resonant voice, they must have a general education, and be familiar with other languages besides English. They are frequently called up to pronounce foreign names and use foreign phrases. French, German and Italian are the languages besides English that are of most value to them.

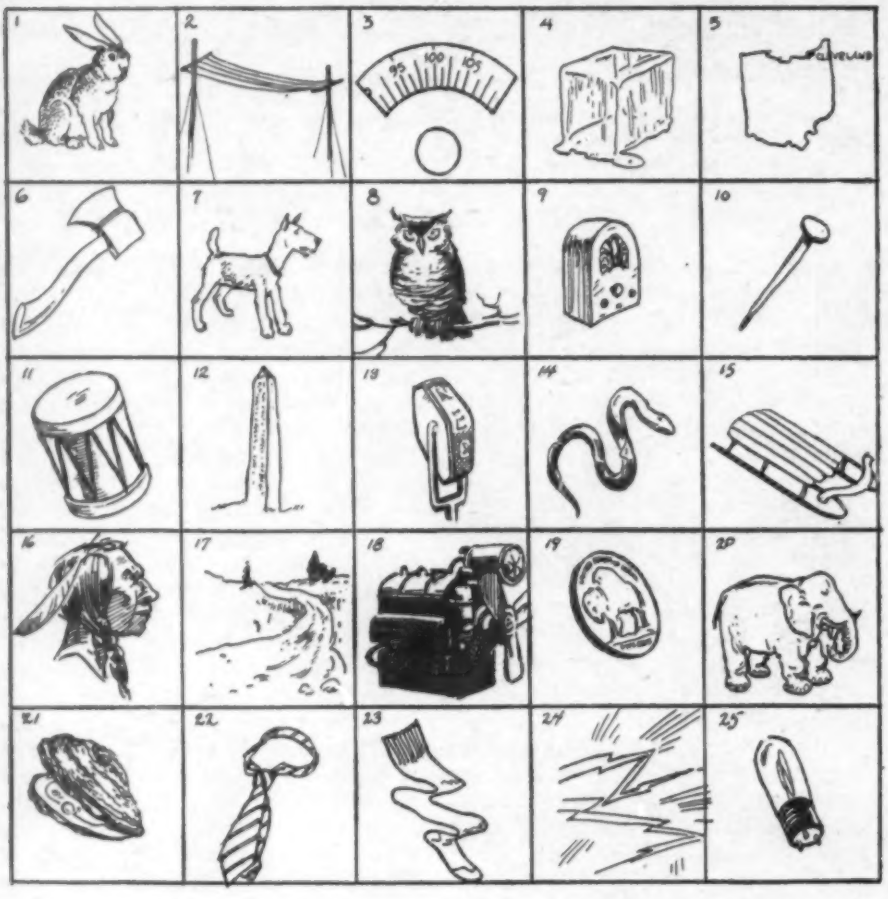
MATCH YOUR WITS

The Weekly Puzzle Page

By EUGENE SHEFFER

TUNE IN ON THIS RADIO REBUS

A rebus is a puzzle which represents words by pictures. In the frame of squares below, you will find 25 different objects. Several of them are connected in some way with radio. When you have identified each object, write the first letter of each word in its proper place in the corresponding diagram at the bottom of the page. If you name all the objects correctly and then place the first letter of each object named in its proper box, you will have a five-letter word square, that is, a group of five words which form the same words across and down.



Place initial letters of above drawing in diagram below, which completed, makes a word square.

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25

HIDDEN RIVERS SOLUTION

The HIDDEN RIVERS in the first two prize-winning lists submitted in the contest, and printed on this page last week, are as follows—

Robert Seaver's List

1. Missouri.
2. Nile.
3. Red.
4. Platte.
5. Rhone.

Genevieve M. Giblin's List

1. Colorado.
2. Cumberland.
3. Meuse.
4. Platte.
5. Seine.

TRUCE TO PEACE

Nineteen years ago, in the village of Rethondes in eastern France, was signed the Armistice which put an end to the World War. We are celebrating Armistice Day in our own way by inviting you to change the word TRUCE to PEACE in seven jumps. Starting with the word TRUCE, form a new word by changing only one letter. Then go on to the next line of squares and form another new word by changing one letter of the previous word.

T	R	U	C	E
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
P	E	A	C	E

ANSWERS TO QUIZ

UNDERLINE THE ERROR

(The correct words appear in italics)

1. President Roosevelt wants Congress to pass a law to allow *"regional* planning."

2. Shiva Temple, in *Arizona,* was explored by scientists about *two months* ago.

3. The subway is called the "Metro" in Paris and the *"tubes"* or *"underground"* in London.

4. No error.

5. The fastest swimming stroke is the *crawl* stroke.

MUMBLE-JUMBLE

1. Ugly billboards are eyesores on the highway.
2. The supreme court has nine judges and no jury.
3. Dictionaries give the standard pronunciations used by well-trained speakers.
4. Not all inventions make life better for us.
5. Airplanes are useful for more than transportation.

TIME, PLEASE!

1 — (1582). 2 — (1837). 3 — (about 1868). 4 — (1890). 5 — (1903). 6 — (1935).

WHAT'S WHAT

(A) The average weekly wage of a railroad conductor today is *$54.02.*

(B) *Most states* require drivers of automobiles to pass driving tests.

BE CAREFUL!

1. Portland cement always contains clay.
2. A patent lasts seventeen years.
3. Coast guard workers equal 4,000.

KNOW YOUR WORDS

1. Slander .....O..... Praise
2. Writhe .....S..... Squirm
3. Ballad .....S..... Song
4. Acne .....N..... Top
5. Resistance .....O..... Surrender
6. Drawling .....N..... Sketching
7. Pantomime ....S..... Spectacle
8. Malice .....O..... Kindness
9. Convention ....S..... Meeting
10. Glamour .....S..... Enchantment
11. Coordinate ....S..... Harmonize
12. Unanimous ....O..... Disagreeing